

## CLAIMS

What is claimed is:

- 5        1. A computing resource management method comprising:
  - establishing a pool of free computing resources in a computing system;
- 10      2. selecting a free computing resource from said pool of free computing resources to replace an operating computing resource in said computing system; and
  - configuring said selected free computing resource to operate in said computing system, after replacing said operating computing resource with said free computing resource in said computing system, wherein said free computing resources comprises resources not preconfigured for use in said computing system.
- 15      3. The method of claim 1, wherein said selected free computing resource is configured to operate in accordance with a configuration of said operating computing resource being replaced.
- 20      4. The method of claim 1, wherein said selected free computing resource is not configured to operate in accordance with a configuration of said operating computing resource being replaced.
- 25      5. The method of claim 1, wherein said selecting and configuring said free computing resource is initiated automatically upon a failure of said operating computing resource in said computing system.
- 30      6. The method of claim 1, wherein said selecting and configuring said free computing resource is initiated in response to an end-user request for a changed operating computing resource in said computing system.
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6. The method of claim 1, wherein said selecting and configuring of said free computing resource is based on a usage plan for using said free resources in said free pool of computing resources.
- 5 7. The method of claim 6, wherein said usage plan for using said free resources is implementable automatically in response to a failure of an operating computing resources in said computing system.
- 10 8. The method of claim 1, wherein said selecting and configuring said free computing resource to replace said operating computing resource occurs transparently to end-users in said computing system.
- 15 9. The method of claim 1, wherein said computing system comprises a Utility Data Center.
10. The method of claim 1, wherein said computing system comprises a computer network.
- 20 11. The method of claim 1, further including monitoring said computing system to detect failed operating computing resources.
- 25 12. The method of claim 11, further including relegating said failed operating computing resources to a pool of quarantined computing resources.
13. The method of claim 12, further including rehabilitating said failed operating computing resources for reprovisioning into said computing system.
- 30 14. The method of claim 1, wherein said computing resources comprises routers, servers, data storage systems and CPU's.
15. A computing resource management system comprising:  
35 a pool of free computing resource in a computing system;

a pool of operating computing resource operating in said computing system; and

5 means for selecting a selected free computing resource from said pool of free computing resources to replace a first operating computing resource in said computing system; and

10 means for configuring said selected free computing resource to operate in said computing system after replacing said first operating computing resource with said selected free computing resource, wherein said free computing resources comprises resources not preconfigured for use in said computing system.

15 16. The computing resource management system of claim 15, wherein said means for configuring said selected free computing resource is operable to configure said selected free computing resource to operate in accordance with a configuration of said first operating resource being replaced.

20 17. The computing resource management system of claim 15, wherein said means for configuring said selected free computing resource is operable to configure said selected free computing resource not to operate in accordance with a configuration of said first operating resource being replaced.

25 18. The computing resource management system of claim 15, wherein said means for configuring said selected free computing resource is operable to automatically configure said selected computing resource to operate in said computing system upon a failure of said first operating computing resource in said computing system.

30 19. The computing resource management system of claim 15, wherein said means for configuring said selected free computing resource is operable to automatically configure said selected free computing resource in response to an end-user request for changing said first operating computing resource in said computing system.

20. The computing resource management system of claim 15, wherein  
said means for configuring said selected free computing resource is  
operable to configure said selected free computing resources  
transparently to an end-user in said computing system.  
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10. 21. The computing resource management system of claim 15, wherein  
said means for configuring said selected free computing resources is  
operable to configure said selected free computing resources based  
on a usage plan for using said free computing resources in said free  
computing resource pool.
15. 22. A computer-useable storage medium comprising computer-readable  
program code embodied therein for causing a computer system to  
implement a computing resource management method instructions,  
said program code including a resource manager module, said  
resource manager module comprising instructions for:  
20 monitoring a pool of free computing resources in a computing  
system;  
selecting a selected free computing resource from said pool of free  
computing resources to replace an operating computing resource  
in said computing system; and  
25 configuring said selected free computing resource to operate in  
said computing system after replacing said operating computing  
resource with said selected free computing resource, wherein said  
free computing resources comprises resources not preconfigured  
for use in said computing system.  
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23. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instructions for monitoring said  
operating computing resources in said computing system.
35. 24. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instructions for detecting  
failures of said operating computing resource in said computing  
system.

25. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instructions for configuring said  
selected free computing resource to operate in accordance with a  
5 configuration of said operating computing resource being replaced.
26. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instructions for configuring said  
selected free computing resource not to operate in accordance with a  
10 configuration of said operating resource being replaced.
27. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instructions for selecting and  
configuring said free computing resource automatically upon  
15 detecting a failure of said operating computing resource in said  
computing system.
28. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instructions for selecting and  
configuring said free computing resource based on an end-user  
20 request for operating computing resource in said computing system.
29. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instruction for selecting and  
configuring said free computing resource transparently to an end-  
25 user in said computing system.
30. The computer-useable storage medium of claim 22, wherein said  
resource manager module includes instruction for selecting and  
configuring said free computing resource based on a usage plan for  
30 using computing resources from said free computing resources pool.